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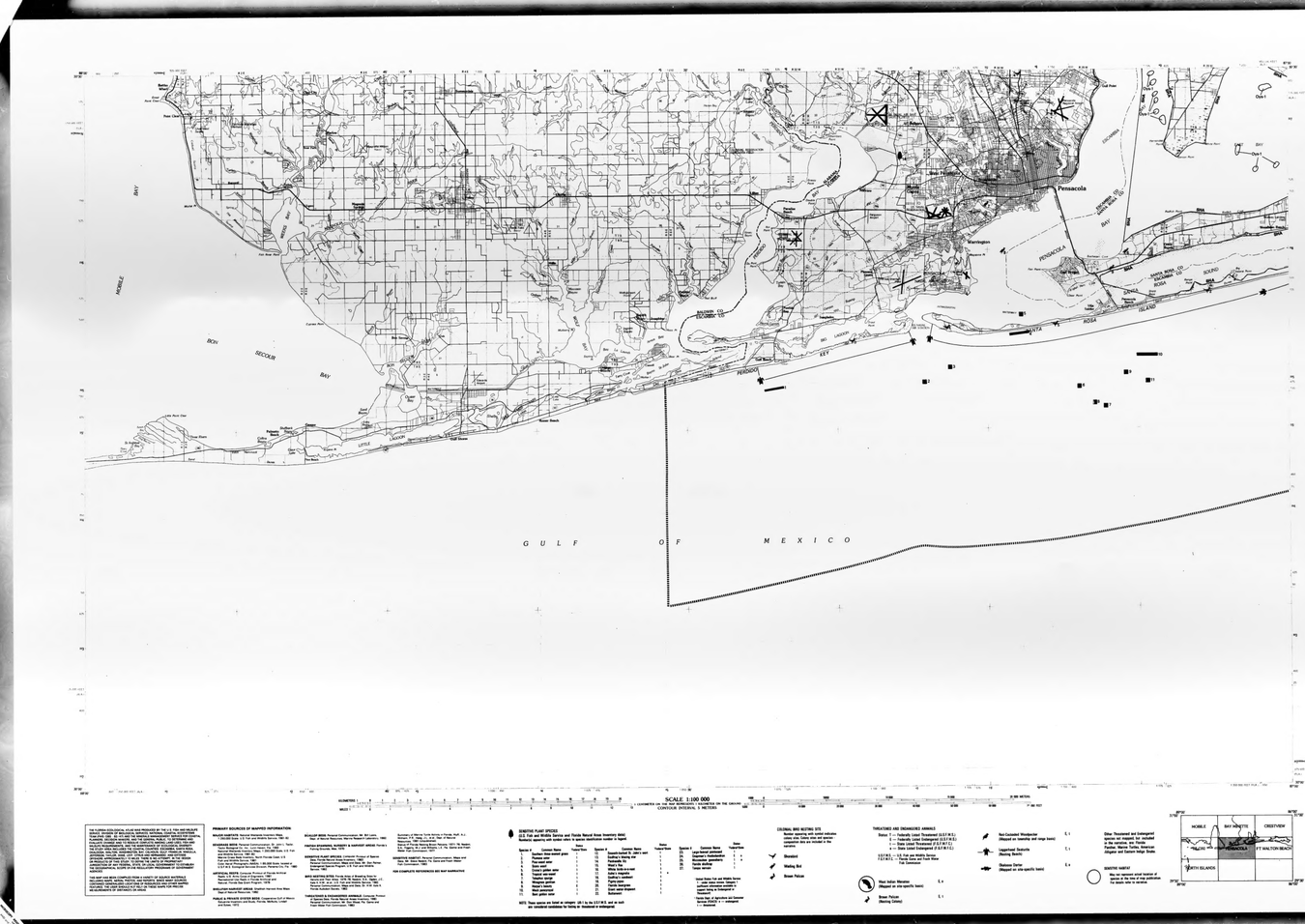
PENSACOLA,FLORIDA ECOLOGICAL ATLAS, BIOLOGICAL RESOURCES. . . FWS/OBS-82/47.1, MAP A2. . . UNITED STATES DEPARTMENT OF THE INTERIOR. . . 1984

1 OF 1
12.5X
SUPTDOCS/GPO
MAP A2



MAP A2

Pensacola

FLORIDA ECOLOGICAL ATLAS

BIOLOGICAL RESOURCES

ORIGINAL

Scale 1:100 000

TOPICAL MAPS IN THIS ATLAS:
A. BIOLOGICAL RESOURCES
B. SOCIOECONOMIC FEATURES
C. SOILS AND LANDFORMS
D. OIL, GAS AND MINERALS
E. HYDROLOGY AND CLIMATOLOGY

1984

Produced by U.S. Fish and Wildlife Service and Minerals Management Service

Projection and 10,000 meter grid, zone 17. Universal Transverse Mercator
1:100 000 scale base based on Florida coordinate system, west zone

Overlay material compiled in 1983 from base available data obtained from Federal, State and Local government agencies and other sources.

MAJOR HABITATS
- Estuarine Subtidal/ Tidal Marsh
- Estuarine Scrub/Shrub (Mangrove)
- Palustrine (freshwater) Marsh
- Palustrine Forest
- Seagrass Bed

ARTIFICIAL REEF
(Permitted by Florida Dept. of Environmental Regulation)
Numbers refer to reefs site (a complete list with a narrative, that's shown only on map.

SHELLFISH HARVEST AREA
(Florida Dept. of Natural Resources)

SWAA — Shellfish Harvest Approved
SPACA — Shellfish Harvest Conditionally Approved

NOTE: Due to Dept. of Natural Resource 2000 water quality standards all other harvesting areas are prohibited or closed. Harvesting of shellfish from these areas is allowed only for bottle relay, or depuration of harvest areas under DNR Shellfish Environmental Assessment Section.

OYSTER — Public Oyster Bed (Areas)
CLAM — Private Oyster Bed (Leases)
SCALLOP — Scallop Bed

FINFISH SPAWNING, NURSERY AND HARVEST AREAS
(Recreational Reef and Live Fishing)

FINFISH CATEGORY	SPAWNING: Common Name	Spawning Season J F M A M J J A S O N D	NURSERY: Nursery Habitat Estuarine Tidal Marsh	Estuarine Scrub/Shrub (Mangrove)	Palustrine (freshwater) Marsh	Palustrine Forest	Seagrass Bed	HARVEST: Recreational Reef and Live Fishing	Commercial Reef and Live Fishing	Bait Fishing	Spearfishing
ESTUARINE DEPENDENT FINFISH											
Red Drum	L	SWAN	■	■	■	■	■	■	■	■	■
Spotted Seatrout	L	SWAN	■	■	■	■	■	■	■	■	■
Spanish Mackerel	L	SWAN						■	■		
Atlantic Croaker	L	SWA	SWA	■	■	■	■	■	■	■	■
Southern Flounder	L	SWA	■	■	■	■	■	■	■	■	■
Striped Mullet	L	SWA	■	■	■	■	■	■	■	■	■
Crevalle Jack	L	SWA						■	■	■	■
Gulf Menhaden	L	SWA	■	■	■	■	■	■	■	■	■
Pinfish	L	SWAN	■	■	■	■	■	■	■	■	■
REEF FISHES											
Red Grouper	L	SWAN						■	■	■	■
Goliath	L	SWA						■	■	■	■
Gag Grouper	L	SWA						■	■	■	■
Scamp	L	SWA						■	■	■	■
Red Snapper	L	SWAN						■	■	■	■
Mangrove Snapper	L	SWAN						■	■	■	■
COASTAL PELAGIC FISHES											
King Mackerel	L	SWA	SWAN					■	■	■	■
Spanish Mackerel	L	SWA	SWAN					■	■	■	■

KEY:
L = Estuarine
S = Coastal
CC = Commercial Stuff
REC = Rose Commercial Stuff

MIGRATION TYPE:
a = Anadromously Restricted
c = Inshore-Postorbital Range
o = Restricted Migration
x = Excessive Migration

STUDY AREA BOUNDARY

Offshore
State (Coast)
Inland (Rivers)

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THE FLORIDA ECOLOGICAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES, NATIONAL COASTAL ECOSYSTEMS TEAM, AND THE MINERALS MANAGEMENT SERVICE, ATLANTIC OCS REGION. THE PURPOSES INCLUDED IDENTIFYING AND DESCRIBING HABITAT, DISTRIBUTION AND ABUNDANCE OF FISH AND WILDLIFE RESOURCES AND ASSESSING THEIR SENSITIVITY TO OIL AND GAS RELATED REQUIREMENTS, AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY, STABILITY AND PRODUCTIVITY. THE ATLAS IS INTENDED TO BE USED BY FEDERAL, STATE AND LOCAL GOVERNMENT AGENCIES, INDUSTRY, CONSULTANTS, ACADEMIC INSTITUTIONS AND THE INTERESTED PUBLIC IN ASSESSING THE POTENTIAL IMPACTS OF OCS OIL AND GAS DEVELOPMENT AND PRODUCTION ON FISH, SHELLFISH AND WILDLIFE RESOURCES AND HABITATS. IN PREPARATION OF THIS ATLAS, DEFINING THE LIMITS OF RESOURCES AND HABITATS WAS BASED ON THE BEST AVAILABLE DATA AT THE TIME OF THE ENVIRONMENTAL ASSESSMENTS, NOTIFY OUR RESOURCES PROGRAMS OF SIGNIFICANT CHANGES.

THE MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCES INTERFACE WITH LOCAL EXPERTS. SOURCES ARE REFERENCED IN THE TEXT. THE MAPS ARE INTENDED FOR USE AT A SCALE OF 1:100,000 OR SMALLER. THE USER SHOULD BE AWARE THAT THESE MAPS FOR PRECISE MEASUREMENT OF DISTANCES OR AREAS.

PRIMARY SOURCES OF MAPPED INFORMATION:

WILDLIFE HABITATS: National Wetlands Inventory Maps, Mobile, Ala. 1:80,000 and Pensacola, Fla. 1:100,000, 1982

MIGRATORY BIRDS: Fish and Wildlife Service, Mr. Keith Parker, Regional Ofc., Mr. Lynn Hood, Ofc., 1983

SEA TURTLES: Fish and Wildlife Service, Mr. Jim Woodward, Jacksonville Ofc., 1983; Florida Game & Fresh Water Fish and Wildlife Service, 1981

ARTIFICIAL REEFS: Compiled Portions of Florida Archival Publication, Florida Game & Fresh Water Fish Commission, Marine Fisheries Section, Tallahassee, Fla. 1978

SHELLFISH HARVEST AREAS: Shellfish Harvest Area Maps, Florida Dept. of Natural Resources, 1983

FINFISH & PENAEID SHRIMP AREAS: Cooperative Gulf of Mexico Estuarine Inventory and Study: Florida, Wilkens, Lindall, and Poiner, 1977

BIOLOGICAL DATA: Personal Communication, Mr. Bill Lyons, Dept. of Marine Resources, Marine Research Laboratory, 1982

FINFISH SPAWNING, NURSERY & HARVEST AREAS: Florida's Fabulous Fishes, Florida Game & Fresh Water Fish Commission, 1982

SHRIMPING PLANKTONIC AREAS: Cooperative Program of Marine Data, Florida Marine Data Inventory, 1982

SHRIMPING AREAS: Personal Communication, Mr. Allen Nelson, Shrimping Captain, Pogies, U.S. Fish and Wildlife Service, 1982

BIRD NESTING SITES: Florida Dept. of Natural & Parks for Preservation of Nongame Birds, Tall Timbers Research, Inc., Vol. 3, No. 3-4, Fall, 1977; Fish and Wildlife Service, 1982 Personal Communication, Mary Ann Bowe, Ft. Pierce, and Florida Audubon Society, Tallahassee, Fla. 1982

THREATENED & ENDANGERED ANIMALS: Fish and Wildlife Service, Jacksonville Ofc., 1983

Illustration of Marine Turtle Nesting in Florida, Ruth, S.J., Florida Dept. of Natural Resources, Marine Research Laboratory, 1982 (Unpublished)

Florida's Fabulous Wildlife, Florida Audubon Society, 1977, Mr. Stephen Kajeski, Ph.D. and Mr. Frank Wagner, Ph.D., Game and Fresh Water Fish Commission

FOR COMPLETE REFERENCES SEE MAP NARRATIVE

SENSITIVE PLANT SPECIES
U.S. Fish and Wildlife Service and Florida Natural Areas Inventory (data)
Numbers apparently with scales refer to species identification number in legend

Species #	Common Name	Date Federal Rare	Species #	Common Name	Date Federal Rare
1.	Sandhill crane several grass		13.	Godfrey's butterwort	E
2.	Florida torreya		14.	Godfrey's Panicle Ash	
3.	Pine-woods orchid		15.	Hookbeaks Oil	
4.	Curtiss' milkweed		16.	Large-fruit sandmat	
5.	Curtiss's golden aster		17.	Many-flowered grass-pink	
6.	Tropical sea-oxeye		18.	Nuttall's rayless-daisy	
7.	Wiregrass gentian		19.	Panic-grass	
8.	Wiregrass gentian		20.	Pigeon wings	
9.	Pondspice		21.	Quill-leaved euphorbia	
10.	Robert's beakrush		22.	Scarlet catchfly	
11.	Rose pogonia		23.	Small-anthered bittercress	
12.	Short-leaved rosemary		24.	Sweet-scented spiranthes	
			25.	Sweetscent	

NOTE: These species are listed as category (2c) by the 2/27/80 FR and as such are considered candidates for listing as threatened or endangered.

COLONIAL BIRD NESTING SITE
Number appearing with symbol indicates the number of species for which the composition data are included in the narrative.

- Shorebird
- Wading Bird
- Brown Pelican

THREATENED AND ENDANGERED ANIMALS
Status: T — Federally Listed Threatened (U.S.F.W.S.)
E — Federally Listed Endangered (U.S.F.W.S.)
t — State Listed Threatened (F.G.F.W.F.C.)
e — State Listed Endangered (F.G.F.W.F.C.)

U.S.F.W.S. — U.S. Fish and Wildlife Service
F.G.F.W.F.C. — Florida Game and Fresh Water Fish Commission

Species #	Common Name	Date Federal Rare	Date State Rare
26.	Eastern brown pelican	T	e
27.	Osprey		t
28.	Bald eagle	T	e
29.	Peregrine falcon	E	e

Green Sea Turtle, Hawksbill and Kemps' Ridley (FWS/E = endangered FWS/T = threatened)

Red Indian Wanderer (Skipper) on site-specific basis) — E, t
Brown Pelican (Nesting Colony) — E, t
Non-Colonial Woodpecker (Skipper) on township and range basis) — E, t
Loggerhead Shrike (Nesting Beach) — E, t
Choctaw Darter (Skipper) on site-specific basis) — E, t

SENSITIVE HABITAT
May not represent actual location of habitat, but rather the area in which habitat can be found, refer to narrative.

Other Threatened and Endangered species which may be found in the vicinities are: Florida Panther, Marine Turtles, American Alligator and Eastern Indigo Snake.